



## **SAGUACHE COUNTY GOVERNMENT**

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February 29, 2008

Michael Blenden, USFWS Project Leader  
San Luis Valley NWR Complex  
9383 El Rancho Lane, Alamosa, CO 81131

Dear Mr. Blenden,

Saguache County Commissioners, staff and consultants have reviewed the Environmental Assessment prepared by USFWS in collaboration with ENSR. The following are our comments and questions based on our understanding of the Environmental Assessment and the findings and recommendations contained therein.

While recognizing that the Service has expended a great deal of time and effort, under difficult circumstances, the Saguache County Board of County Commissioners finds the Environmental Assessment (EA) prepared by USFWS for the Baca Wildlife Refuge to be inadequate in protecting the health, safety and welfare of the public, and the precious natural resources of the Refuge and our region, important to the local quality of life and economy. Our comments point out both broad and fine points that lead the Board to find that an Environmental Impact Statement (EIS) is indicated. We respectfully request that an EIS be completed to ensure that USFWS fulfills its charge to maximally protect the Refuge and effectively mitigate the many impacts, potential and real, which reach beyond the Refuge boundaries.

The Commissioners, as discussed below, are very disappointed that the Service chose not to include the County as a Co-Operating Agency early in the scoping process. This would have provided the County the opportunity to fully participate in the NEPA process, as well as have a more complete understanding of the process and the factors that lead Fish and Wildlife to select an EA instead of an EIS approach. Such involvement may have alleviated some of the concerns expressed herein by the County. The Commissioners look forward to resolving the status issue as this process continues.

The following is a summary of the key points, from Saguache County's point of view, substantiating the need for an EIS, or completion of a Comprehensive Conservation Plan:

- Compliance with NEPA's CEQ definitions of significance, and use of the EA's term: RFFA – Reasonably Foreseeable Future Action as a basis for no significance is questionable.
- The draft EA does not provide adequate data, analyses, or documentation, as a basis for findings of no significance.
- Studies / Plans / Reviews, stated to be completed in the future, are referred to in many clauses, which then go on to find no significance, in advance of those plans, studies and reviews.

- Consultations were unduly limited, and no Cooperating Agencies were represented in addressing the assets of the Refuge and how to best protect them in the event of Oil and Gas activities.
- The unique cultural and critical socio-economic aspects of the impacted area are insufficiently documented and addressed.
- Risk, cost and benefit factors are not fully addressed.
- Best Practices are not secured.
- Cross-jurisdictional roles, responsibilities are unclear.

We have endeavored in the APPENDICES to provide detail, as to specific sections of the EA that exemplify the key points above, and to provide examples of issues warranting further evaluation and planning, as well as unanswered questions, which remain to be addressed in the NEPA process. These demonstrate the need for USFWS to fulfill its responsibility to identify and mitigate impacts of activities on the Refuge, with the thoroughness and care provided in an EIS.

Decisions that we, the governmental decision-makers make for the Refuge, the National Park as a whole, the County and the Valley, not only affect our current local and national constituency and “biosphere”. They determine the legacy we will leave for future generations, and the long-term integrity of the environment.

We respectfully request that you give every consideration to the comments in this letter and its Appendices, and address them with diligence. The County is available to provide appropriate support to the Service in this process. As always, Saguache County appreciates the efforts and services provided by Fish and Wildlife to the County and its residents.

Sincerely,

FOR SAGUACHE COUNTY BOARD OF COMMISSIONERS:

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Sam Pace, Chairman

**CC –**

**Dean Rundle, USFWS  
Governor Bill Ritter  
US Senator Ken Salazar  
Rep. John Salazar**

**Senator Gail Schwartz  
Rep. Kathleen Curry  
Dave Neslin, COGCC - Director  
Trési Hout, COGCC Commissioner**

## APPENDICES

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### APPENDIX A - NEPA Process

#### • COOPERATING AGENCIES

##### EA section I. USFWS Environmental Assessment

##### 5.0 Consultation and Coordination

##### 5.1 Introduction

*"The USFWS is the lead agency for this EA. **There are no cooperating agencies.**"*

Delay in USFWS offering Saguache County Cooperating Agency status resulted in loss of the opportunity for early involvement in the scoping process as local government decision-makers. As such, we understood we would be at the table during identification of the EA team, the issues and questions to be addressed in the EA, how, and by whom. While USFWS is responsible for the conduct and determinations in the EA, Cooperating Agency status is the NEPA mechanism for involving decision-makers and experts early in the process. Instead, the County, and participation of other interested and expert agencies and organizations, was relegated to review and commenting on the EA only during public comment periods. Given the unique refuge setting and hydrology, historical and current cultural qualities, and socio-economic factors, and with the potential for long term oil and gas operations - involvement and support of Cooperating Agencies is appropriate and prudent. Numerous clarifications are needed for the Cooperating Agency MOU presented to Saguache County by USFWS. We look forward to completing the MOU with you.

- **RFFA - Reasonably Foreseeable Future Actions**

## **Section II. USFWS Environmental Assessment, Definitions - Page ii –**

MANY findings of no significance throughout the EA are stated to be based on the limited scope of the test well operations, and, no RFFA. The hope for future production is the goal of Lexam in drilling test wells. If they find resources - they will go to production. **This is a reasonably foreseeable future action.**

Substantiation of the intended, reasonably foreseeable, future actions is apparent in Lexam's presentation at: [http://www.lexamexplorations.com/energy\\_baca.php](http://www.lexamexplorations.com/energy_baca.php)

*"Lexam's Baca Oil and Gas Project contains all of the ingredients necessary to make this an attractive, frontier exploration play. A discovery would turn Lexam's 100,000-acre land position into a strategic asset capable of adding substantially to the oil and gas reserves of participating companies."*

- **SIGNIFICANCE**

We have reviewed the N.E.P.A. document of the Council of Environmental Quality (CEQ), DEFINITION OF "SIGNIFICANCE", attached as **APPENDIX B**. See also: [www.nepa.gov/nepa/regs/ceq/1508.htm](http://www.nepa.gov/nepa/regs/ceq/1508.htm) - 1508.27

Significance, as defined for the NEPA process requires addressing both context and intensity.

*"(a) Context. This means that the significance of an action **must be analyzed** in several contexts **such as society as a whole** (human, national), **the affected region, the affected interests, and locality... Both short and long-term effects are relevant...**"*

The EA does not speak to the required consideration stated in CEQ Intensity Factors:

***"6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration."***

***"7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts."***

Please see **Appendix C** for a list of examples of EA sections where findings of no significance were based on the temporary nature of the test well drilling and fail to address potential future operations, and longer term and cumulative effects as NEPA requires.

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## **APPENDIX B - Council of Environmental Quality (CEQ)**

### **DEFINITION OF "SIGNIFICANCE"**

<http://www.nepa.gov/nepa/regs/ceq/1508.htm> - 1508.27

*\*Sec. 1508.27 Significantly\**

"Significantly" as used in NEPA requires considerations of both context and intensity:

(a) Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

(b) Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
2. The degree to which the proposed action affects public health or safety.
3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.
5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

*~Provided by: Citizens for San Luis Valley Water Protection Coalition,  
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## **APPENDIX C**

**Findings of no significance based on the temporary nature of the test well drilling, which fail to recognize future operations and longer term and cumulative effects as NEPA requires.**

### **4.0 Environmental Consequences / 4.2 Geology, Mineral Resources, and Soils,**

#### **4.2.1 Effects of Lexam's Planned Exploration Program - 2<sup>nd</sup> paragraph, last sentence:**

*"Because of the temporary nature of the operations, the quantity of materials (oils and fuels) on-site would be relatively small. Impacts from spills would be short term and limited to the immediate vicinity of the spill and impacted soil would have to be removed and disposed offsite in accordance with applicable rules."*

#### **Page 4-10, 4.6.2.1 Big Game**

*"Impacts to big game species are expected to be minimal because of USFWS protective measures and because of the temporary nature of the activities."*

#### **Page 4-11, 4.6.2.2 Small Game**

*"Impacts to small game would be greater than those to large game because they are limited in their ability to temporarily relocate during periods of disturbance because of their smaller size. Temporary disturbances and habitat losses could cause unnatural movements of these species away from the disturbance and altered habitats, which may result in an increased vulnerability to predators..."*

### **Page 4-18, 4.10 Socioeconomic Resources / 4.10.1 Effects of Lexam's Planned Exploration Program, 4.10.5 Cumulative Impacts, 4.10.5.1 Proposed Action**

*"Because no RFFAs have been identified in the cumulative effects area and socioeconomic impacts are anticipated to be minimal and temporary, there would be no cumulative impacts."*

### **Page 4-8, 4.5.2 Proposed Action Alternative / 4.5.2.1 Vegetation and Wetlands, 2<sup>nd</sup> paragraph**

*"Areas temporarily disturbed by construction and operation activities would be reclaimed as described above. In 3 to 5 years following successful reclamation, these areas would provide food, cover and nesting wildlife habitat. However, it may require up to 15 to 20 years for vegetation communities, especially shrub communities, to return to predisturbance levels. Those areas disturbed by construction and operation activities would be temporarily unavailable to wildlife use and as habitat. Therefore, impacts to vegetation and wetlands would be less than significant."*

### **Page 4-19, 4.10.5 Cumulative Impacts / 4.10.5.1 Proposed Action**

*"Because no RFFAs have been identified in the cumulative effects area and socioeconomic impacts are anticipated to be minimal and temporary, there would be no cumulative impacts."*

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## **APPENDIX D**

**Future studies, reviews and plans referred to in the EA, without necessary details (who, what where, when and how they will be done), and referenced as a basis for finding no significance**

**Page 1-8, 1.5.2 Other Laws Relating to Oil and Gas Activity on NWR System Lands / 1.5.2.2 National Historic Preservation Act (NHPA) of 1966, as amended, last sentence**

*“... USFWS is conducting a review of effects on historical and archaeological sites in order to ensure that the proposed measures protect cultural resources to the maximum extent practicable.”*

**What are the monitoring and compliance plans for USFWS requirements and others, as cited – Page 1-8, 1.5.3 Other Federal Regulations**

*“The planned Lexam exploration activities also are governed by a number of other federal regulatory programs. The list below is not intended to be exhaustive:*

*Clean Water Act  
Clean Air Act  
American Indian Religious Freedom Act (AIRFA)  
Native American Grave Protection and Repatriation Act (NAGPRA)  
Resource Conservation Recovery Act  
Occupational Health and Safety Administration (OSHA) regulations  
Department of Transportation (DOT) regulations”*

**Page 2.7, Last paragraph**

*“USFWS believes that impact of this planned drilling program on surface resources of the Refuge can be thoroughly assessed and evaluated prior to the completion of the CCP”.*

What is the plan for the thorough assessment and evaluation referenced?

**Page 3-35, 3.7 Cultural resources 2<sup>nd</sup> paragraph**

*“USFWS is conducting a review of effects on historical and archaeological sites in order to ensure that the proposed measures protect cultural resources to the maximum extent practicable.”*

**Page 4-11**

Preconstruction surveys for wildlife species are referenced in Big Game and Migratory Bird sections.

**Page 4-14**

*“In accordance with applicant-committed environmental protection measures, all construction of roads and pads would occur in a way which best facilitates their complete removal and reclamation once Lexam activities have ceased at these sites.”*

No Plan is offered or required.

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## **APPENDIX E**

### **Resource Protection**

#### **A) WATER**

**i. HYDROLOGY - Extensive studies and models of the aquifer under the San Luis Valley have been completed in recent years, finding the aquifer to be unique, and the hydrology uncertain.** This unique aquifer is critical to the ecology of the Great Sand Dunes, also unique, in the National Park. Protection of this most valuable and irreplaceable resource to the Park and the Valley is crucial.

##### **Applicable CEQ significance factors:**

*3. "Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas."*

*5. The degree to which the possible effects on the human environment are highly uncertain, or involve unique or unknown risks.*

It is our understanding that in this case "controversial" refers to scientific uncertainty and conflicts in understanding. This condition appears to apply to the aquifer, and may also be relevant to the fault geology, warranting consultation with scientific experts who contributed to the best models available, more explicit analyses and discussion with regard to significance.

**ii. WETLANDS and RIPARIAN protection** - Likewise, consultation with other agencies and organizations is lacking in determining optimal locations for drilling and ensuring protection of wetlands and riparian areas.

Risk analyses specific to deep wells was not presented. Nor was there discussion of the potential effects of water contamination, available clean-up measures and their effectiveness, and impacts on down stream water owners. (For example: spill drift, geothermal impacts, cross aquifer contamination, etc.) Such analyses are also needed to establish bonding and insurance requirements, which reflect the potential damage to water resources.

#### **Section 4.4.2 Proposed Action Alternative / 4.4.2.1 Surface Water Quality, last sentence**

*"The primary hazardous materials to be used are fuels (diesel and gasoline), drilling mud additives, and cement."*

For maximum protection of the National Refuge, and the region's water – best practices are indicated in using known, NON-toxic options. If any hazardous substances are allowed, there are numerous other concerns, which warrant more complete attention, such as – preparation of community emergency first responders with knowledge of hazardous ingredients and treatments in the event of a contamination; and plans for OSHA compliance.

#### **B) AIR**

##### **Section 4.3 Air Quality**

**Analyses do not reference the Class 1 status of the Sand Dunes and discuss potential impacts/mitigations from that framework.**



**Page 1-1, Introduction, paragraph 2, last sentence**

*“Management of the refuge will emphasize migratory bird conservation and will consider the refuge’s role in broader landscape conservation efforts” (USFWS 2005).”*

Data regarding the current status, and potential risks to the internationally recognized flyway is needed as a basis for analyses.

Discussion of the broader conservation efforts also referenced in this section, fails to mention the Crestone Baca Land Trust, Manitou Habitat Conservation Program, and other Valley conservation efforts. Completion of consultations with adjoining agencies (NPS, FS) in this regard is unclear.

**C) Cultural/Historical protections**

**Page 1-1, 3<sup>rd</sup> paragraph from the bottom**

*“In addition to the plant and animal resources contained on the refuge, the area also is rich in historic and cultural resource sites, some of which date over 12,000 years ago. Many of these are eligible to be placed on the National Register of Historic Places.”*

Analyses should invite further Tribal input, and, consultation with the regional Smithsonian experts, in better defining the assets to be protected.

**Page 3-35, 3.7 Cultural Resources / 3.7.1 Regulatory Framework 2<sup>nd</sup> paragraph**

*“Section 106 of the NHPA requires federal agencies to assess the effects of an undertaking on historical and archaeological sites. **The proposed action is not considered an undertaking as defined by NHPA, and therefore is not subject to review.**”*

**36 CFR PART 800 -- PROTECTION OF HISTORIC PROPERTIES (incorporating amendments effective August 5, 2004) Subpart B -- The Section 106 Process, 800.16 Definitions.**

*“(y) **Undertaking** means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; **and those requiring a Federal permit, license or approval.**”*

This would seem to apply; on what basis was it ruled out?

**Page 3-36, 3.7.2 Cultural Resources Investigations**

Has a Class three inventory been performed for #7 well locations?

**D) Socio-economic impacts**

The presentation of the socio-economic context of the nearest community was cursory, given that its primary source of income is spiritual, artistic and recreational retreat, based on the pristine natural environment and quietude. Valley-wide, agriculture is a predominant economic factor, and is dependent on the health of water and ecological systems.

In section 3.10 it is stated that personnel will base in Alamosa and provide economic benefit there, rather than for the local community. Assessment is needed of the potential for degradation of property values and recreational and retreat tourism, due to aesthetic impacts of industrial activity in the near pristine Refuge environment.

Risk, cost and benefit analyses are needed in order to further define socio-economic impacts and significance to those most directly impacted, and to establish financial responsibility of the operator. How has just compensation been established and guaranteed?

**Page 2-7, 2.4 No Mineral Exploration Alternative – states:**

*“...USFWS has not, to date, pursued this alternative because no funds have been identified...”*

Discussion of the buyout option did not address the value or a projected value range of the mineral estate. What efforts, if any, were made to pursue funds?

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## **APPENDIX F Oil & Gas Operations**

**Page 1-4, Section 1.3 Purpose and Need for the Proposed Action**

*“The scope of this EA does not address production of natural gas and oil from any of the wells described above. If necessary, the USFWS regulation of production and associated transportation would be the subject of a separate analysis pursuant to the National Environmental Policy Act (NEPA).”*

If this EA, or a revised version of it, is the basis for the Record of Decision, it should be limited to the activities it assessed – the test wells only - and explicitly require a new EA and/or EIS review for any future activities.

### **The EA does not address the operator’s procedures to manage a positive find.**

How will Lexam contain, process, transport or otherwise dispose of resources upon finding any? It is our understanding that the operator will somehow “prove it up”, and any such procedures and their impacts should be fully defined and considered in determining significance. For example, flaring to rate findings would pose unacceptable risks to the Baca Refuge, the nearby community, and perhaps impact air quality detrimentally to the Class One asset of the Great Sand Dunes.

**Page 1-17, 1.6.2.4 Water Requirements, top paragraph**

*“... In the event that well water would not be available, water will have to be purchased from an off-site source and trucked to the drilling locations. Depending on daily water needs of the rig and the capacity of the tanker truck, as many as 250 truckloads per well could be required to supply water to the drilling operations.”*

Such an eventuality increases the intensity factors with more significant traffic disturbance of wildlife, wear and tear on roads, dust, and potential for weed introduction. There is no reference to how this will be monitored and mitigated.

**Page 2-9, 2.5.2 Directionally Drill the Wells from Outside of the Refuge, last sentence**

*“Directional drilling of a 14,000-foot deep exploratory well was judged to be neither technically nor economically practical or feasible as described in the following discussion.”*

Who made this judgment, and what are the facts analyzed to come to this conclusion?

**Page 2-11 2.5.3**

*“Lexam believes drilling of the initial well will provide hard data regarding a number of the elements required for entrapment of oil or gas. It is highly likely that there will be significant changes in the interpretative model of the geology as a result of drilling the initial well. Therefore Lexam believes a second well will be required to test additional potential based upon the new information acquired from the initial well.”*

Given the sequential nature of the exploration as described by the operator, why not approve one well now and base approval for second well on positive findings and presentation of the referenced changes in model the 1<sup>st</sup> well would indicate in a second, and presumably later 2<sup>nd</sup> well.

**Page 4-4, paragraph 1**

“The drill rig engine specifications are not known at this time ...”

Air and noise impacts cannot be assessed if the drill engine is unknown and approved as such.

**Page 4-4, paragraph 5**

*“... operators are required to implement a fugitive dust control plan, which can include but are not limited to watering roads, graveling roads, and controlling vehicle speeds.”*

Has USFWS reviewed the referenced plan and confirmed that the COGCC/CPHE standards are adequate for a National Refuge?

**Page 4-8, 4.5.2 Proposed Action Alternative / 4.5.2.1 Vegetation and Wetlands**

Invasive weeds are a growing problem in Saguache County and the Valley. The locations and methods of cleaning equipment are inadequately described.

**Page 4-21, last 3 paragraphs**

Remove language that says Lexam will “strive” to obtain muffling equipment, and will use noise attenuating equipment “if available”, and REQUIRE THAT THEY DO.

**• Cross-jurisdictional issues**

- **COGCC** - The EA refers to COGCC conditions, which have subsequently changed, or are on hold until the EA is complete. Should COGCC implement new rules prior to granting the State permit, the new rules and associated conditions should apply.

- **Emergency Plans** - Limited volunteer personnel, and the potential need for equipment and training are of concern and not acknowledged. NOTE: COGCC has agreed to change the requirement of “a meeting” for Emergency planning, as referenced in the EA, to completion of an agreed upon Plan.

**Page 4-18 4.10.1.3 Emergency Services, last Sentence**

*“Deficiencies in local emergency services will be identified and measures to emergency response will be discussed and implemented.”*

Local and regional emergency personnel, such as Saguache County’s OEM, EMS, Fire Depts, and SLV RETAC and All Hazards should be involved in determining deficiencies and developing an agreeable plan, well in advance of operations commencing.

**• MONITORING PLANS**

In the absence of a Comprehensive Conservation Plan, inadequate baseline data has been collected and presented in the EA, and commensurate monitoring plans are not described.

Qualifications and training of independent monitoring personnel, and details with regard to frequency of monitoring and reporting are lacking.